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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,257	09/26/2001	Vladimir I. Miloushev	099300/0269258 (ZF-700)	9999

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PILLSBURY WINTHROP LLP  
2475 HANOVER STREET  
PALO ALTO, CA 94304-1114

EXAMINER
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KENDALL, CHUCK O

ART UNIT	PAPER NUMBER
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2122

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/964,257	<b>Applicant(s)</b> MILOUSHEV ET AL.	
	<b>Examiner</b> Chuck Kendall	<b>Art Unit</b> 2122	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 September 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19 and 20 is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-18, 22, 23 and 26 is/are rejected.
- 7) ☒ Claim(s) 10, 27 and 28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is in response to the application filed 09/26/01.
2. Claims 1 – 28 are pending.

### *Specification*

3. The use of the trademark Java has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1 – 9, 11 – 18, 22, 23 & 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Brumme et al. USPN 6,134,559.

Regarding claim 1, Brumme anticipates in a software system including a standard mechanism for accessing properties, the standard mechanism including:

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a first operation for obtaining a property identifier (25: 21 – 25);  
a second operation for obtaining a property value (22: 15 – 25); and  
a third operation for setting the property value, an object comprising: a property, the property comprising a property identifier and a property value (14: 54 – 57);  
an implementation of the first operation (25: 20 – 35);  
an implementation of the second operation (22: 15 – 25); and  
an implementation of the third operation, the implementation of the third operation setting both the property identifier and the property value if the third operation is executed for a first time, and changing the property value to a specified new property value if the third operation was previously executed (12: 53 – 55).

Regarding claim 2, the object according to claim 1, wherein the property further comprises a property type and wherein the implementation of the third operation sets the property type in the first entry if the value for the first property has been previously set, the implementation of the third operation sets the property type in the first entry in the table if the value for the first property has not been set (18: 1 – 5).

Regarding claim 3, Brumme anticipates in a software system including a standard mechanism for accessing properties of objects, the standard mechanism including:

a first operation for enumerating property identifiers (25: 21 – 25);  
a second operation for obtaining a property value of a property identified by a property identifier (22: 15 – 25); and  
a third operation for setting the property value of a property identified by a property identifier (14: 54 – 57), an object comprising:  
a table containing a plurality of entries, each entry comprising a property identifier and a property value (33:25 – 65, see Table 3 and 4 for identifier and property value);  
an implementation of the first operation, the implementation of the first operation retrieving a first property identifier of a first property from one of the entries in the table(25: 21 – 25);  
an implementation of the second operation, the implementation of the second operation obtaining the property value from the one entry (22: 15 – 25);

an implementation of the third operation, the implementation of the third operation setting a property value in the one entry if a value for the first property has been previously set, the implementation of the third operation setting a property identifier and a property value in the one entry in the table if a value for the first property has not been set (12: 53 – 55).

Regarding claim 4, the object according to claim 3 wherein the each entry further comprises a property type and wherein the implementation of the third operation sets (26: 5 – 20, shows setting attributes) the property type in the first entry if the value for the first property has been previously set, the implementation of the third operation sets the property type in the first entry in the table if the value for the first property has not been set (26: 5 – 20, shows getting and setting attributes).

Regarding claim 5, the object in claim 3 further comprising a terminal through which properties are accessed and their values from the first table (3: 56 – 59, see database).

Regarding claim 6, a copier object version of claim 1, see rationale as previously discussed above.

Regarding claim 7, Brumme anticipates a system of objects in a software system having a data memory, the system comprising:

an extractor object for extracting first encoded values from the data memory and storing them in the data memory in native machine format (25: 20 – 25, see extract and translate, also see 26: 5 – 10);

a stamper object for storing second encoded values into the data memory, the second encoded values obtained from the data memory in native machine format (34: 25 – 37).

Regarding claim 8, the system in claim 7 the system wherein the data memory is an event Object (14: 41 – 50).

Regarding claim 9, which is the system version of claim 7, see rationale as previously discussed above.

Regarding claim 11, which is the system version of claim 8, see rationale as previously discussed above.

Regarding claim 12, which is the system version of claim 8, see rationale as previously discussed above.

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Regarding claim 13, the system in claim 9 further comprising an arithmetic-logic-unit object for performing arithmetic operations on data values in the container object (15: 55 – 59, see event transformer which performs calculations).

Regarding claim 14, which is the method version of claim 7, see rationale as previously discussed above.

Regarding claim 15, the method of claim 14 further comprising the step of modifying the first value in the container object (12: 55 – 65, see container and role member for addition and subtraction of attributes i.e. modifying).

Regarding claim 16, the method of claim 14 wherein the first event object and the second event object are the same event object (14: 41 – 50).

Regarding claim 17, Brumme anticipates a method in a composition-based software system for manipulating encoded data values in event objects, the method comprising the steps of:

- extracting a first value from a first data field of a first event object (25: 21 – 25);

- decoding the first value into a normalized form (25: 20 – 25, see translate, for decode);

- storing the first value into a second data field of the first event object (9: 45 – 60, see storage and adapters);

- performing an operation that modifies the first value in the second data field, resulting in a second value being stored in the second data field (12: 55 – 65, see container and role member for addition and subtraction of attributes i.e. modifying);

- loading the second value from the second data field (9: 62 – 65);

- storing the second value into the first data field (9: 45 – 60, see storage).

Regarding claim 18, which is the system version of claim 17, see rationale as previously discussed above.

Regarding claim 22, Brumme anticipates an object in a software system, the object comprising:

- a first input terminal through which the object receives a latch event (17:1-10, see events and entry or exit);

- a second input terminal through which the object receives a trigger event (17:1-10, see events and entry or exit, also see triggers);

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a field for storing a reference to the latch event when received on the first input terminal (9: 45 – 60, see storage);

an output terminal through which the object sends the latch event when the trigger event is received through the second input terminal (17: 5 – 20).

Regarding claim 23, an object in a software system, the object comprising:

an input terminal through which the object receives a first input signal (5: 15 – 19);

an output terminal through which the object sends the first input signal (5: 15 – 23, see data source adapter);

a factory terminal through which the object requests the creation a new object instance when the object receives the first input signal (30: 15 – 26);

a property terminal through which the object requests the setting of properties on the new object instance (5: 15 – 23, also see 30: 15 – 26).

Regarding claim 26, which is the system version of claim 22, see rationale as previously discussed above.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 21, 24 & 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brumme et al. USPN 6,134,559 in view of Atsatt et al. USPN 5,758,153.

Regarding claim 21, Brumme discloses an object in a software system, the object comprising:



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an input terminal through which the object receives an input event (5: 15 – 19);

a first output terminal through which the object sends an event containing a first portion of the input event (5: 15 – 23, see data source adapter);

a second output terminal through which the object sends an event containing a second portion of the input event (5: 15 – 23, also see 30: 15 – 26). Brumme doesn't explicitly disclose a first property specifying the size of the first portion. Atsatt discloses in an analogous art the ability to specify a range of values for the properties such as entity size or creation date. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Brumme and Atsatt because, being able to specify parameters or attributes in an object oriented environment is a general practice and would enable more efficient configuring of object properties.

Regarding claim 24, the object in claim 23 further comprising a parameterization terminal through which the object sends a parameterization signal so that an external object can parameterize the new object instance (Atsatt, 1: 37 – 40).

Regarding claim 25, Brumme discloses a system of interconnected objects in a software system, the system of interconnected objects comprising: a dynamic container object for containing objects created by the factory object (Brumme, 2: 25 – 35). Brumme discloses creating objects, however Brumme doesn't explicitly disclose a factory object for receiving creation and destruction events. Atsatt does disclose this feature in Atsatt, 2: 10 – 40, in an object oriented environment. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine, Brumme and Atsatt because, creating and destroying objects in an object oriented environment is a general practice and makes manipulating objects more efficient.

*Allowable Subject Matter*

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8. Claim 10, 27 & 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art doesn't not teach or disclose in combination or as a whole the limitation of:

"...a comparator object for comparing a first data value of encoded data from the data memory to a second data value from the container object and sending a reference to the data memory to a first terminal if the first value is less than the second value, to a second terminal if the first value is equal to the second value, and to a third terminal if the first value is greater than the second value".

" a reset terminal through which the object receives a request to reset the count to zero ”.

" a second output terminal through which the object sends events received through the input terminal when the count of events is under the target number ”.

### *Allowance*

9. The following is an examiner's statement of reasons for allowance:

Per claims 19 and 20, the prior art doesn't not teach or disclose in combination or as a whole the limitation of:

"...a second offset property specifying starting offset for merging;

a reference to a data memory for storing a data portion from the source event, starting from offset specified by the offset property and of size specified by the size property;

a second terminal through which the object receives a merge event;

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a third terminal through which the object sends the merge event, the merge event modified by storing the data portion into the merge event at offset specified by the second offset property ”.

Claims 19 and 20 and therefore in condition for allowance.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

### *Conclusion*

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuck Kendall whose telephone number is 703-3086608. The examiner can normally be reached on 10:00 am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Tuan Dam can be reached on 703-3054552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CHAMELI DAS  
PRIMARY EXAMINER

chuck Kendall  
9/30/04

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CK.